

XII.—*Descriptions of Four new African Freshwater Fishes.* By G. A. BOULENGER, F.R.S.

*Gnathonemus Abadii.*

Depth of body  $3\frac{2}{3}$  times in total length, length of head  $5\frac{1}{2}$  times. Head very slightly longer than deep, with feebly curved upper profile; snout  $\frac{2}{7}$  the length of the head; mouth small, on a line with lower border of eye; chin with a globular dermal appendage; teeth minute, conical, 3 in the upper jaw, 5 in the lower; eye rather large,  $\frac{2}{3}$  the length of the snout, which equals the interocular width. Dorsal 35, originating very slightly in advance of anal, its length  $1\frac{2}{3}$  in its distance from the head. Anal 34, slightly nearer the root of the caudal than the base of the ventral, as long as the head,  $1\frac{2}{4}$  as long as the ventral, reaching far beyond the base of the latter. Caudal scaled in its basal half, with pointed lobes. Caudal peduncle  $3\frac{1}{2}$  times as long as deep, as long as the head. 98 scales in the lateral line,  $\frac{26}{28}$  in a transverse series on the body,  $\frac{21}{20}$  in a transverse series between dorsal and anal, 16 round caudal peduncle. Brownish above, silvery white beneath.

Total length 240 millim.

A single specimen from Djebba, Upper Niger, presented to the British Museum by Capt. G. F. Abadie.

A very distinct species, more nearly allied to *G. Ussheri*, Gthr., and *G. Greshoffi*, Schilth.

*Barilius Loati.*

Depth of body equal to length of head, 4 times in total length. Head twice as long as broad; snout obtusely pointed, projecting strongly beyond the lower jaw,  $1\frac{1}{2}$  to twice as long as the eye, the diameter of which is contained 5 to 6 times in the length of the head,  $1\frac{1}{2}$  to twice in the interocular width; mouth extending to below the posterior third of the eye; no barbels; the naked space between the præopercle and the suborbitals about  $\frac{1}{3}$  the width of the latter. Gill-rakers very short, rudimentary. Dorsal III 7-8, originating at equal distance from the occiput and the root of the caudal, or a little nearer the latter, the second half of its base above the anal; its anterior rays longest,  $\frac{3}{5}$  to  $\frac{2}{3}$  the length of the head. Anal III 13-15, notched, the anterior rays much longer than the others, about as long as the

longest dorsals. Pectoral pointed,  $\frac{3}{4}$  the length of the head, not reaching the ventral, which does not extend beyond the vent. Caudal forked. Caudal peduncle not twice as long as deep. Scales 52-55  $\frac{9-10}{5}$ , 3 between the lateral line and the root of the ventral. 10 to 12 more or less distinct dark vertical bars on each side of the body.

Total length 180 millim.

Several specimens from Wady Halfa, Upper Nile, collected by Mr. W. L. S. Loat.

### *Chrysichthys Sharpii.*

Depth of body  $5\frac{1}{2}$  times in total length, length of head 4 times. Head much depressed,  $\frac{1}{4}$  longer than broad, nearly smooth above; snout broadly rounded, projecting a little beyond the lower jaw, measuring nearly  $\frac{1}{3}$  the length of the head and  $\frac{2}{3}$  the width of the mouth; eye oval,  $\frac{1}{6}$  length of head,  $\frac{2}{5}$  interocular width; occipital process smooth, a little longer than broad, in contact with the interspinous shield; nasal barbel very thin,  $\frac{2}{3}$  the diameter of the eye; maxillary barbel  $\frac{3}{5}$  the length of the head, not reaching the base of the pectoral spine; inner mandibular barbel  $\frac{2}{3}$  the length of the outer, which measures  $\frac{2}{3}$  the length of the head. Vomeropterygoid teeth forming a crescentic band hardly interrupted mesially, this band measuring nearly half the width of the band of premaxillary teeth. Dorsal I 5; spine finely striated, not serrated, half as long as the head; longest soft ray  $\frac{2}{3}$  the length of the head. Adipose dorsal not longer than deep, its base half that of the rayed fin and 7 times in the distance intervening between the two fins. Anal V 13. Pectoral spine as long as dorsal spine, striated, with 12 rather strong retrorse serræ on the inner edge. Ventral not reaching anal. Caudal deeply forked, with long pointed lobes, the longest rays nearly 3 times as long as the median. Caudal peduncle not quite twice as long as deep.

Total length 370 millim.

A single specimen, a skin, from Lake Mweru, presented to the British Museum by Mr. Alfred Sharpe, C.B.

### *Mustacembelus Greshoffii.*

Depth of body 19 times in total length, length of head 9 times. Vent much nearer the end of the snout than the caudal fin, its distance from the head 3 times the length of the latter. Snout 3 times as long as the eye, which is a little shorter than the trifid rostral appendage; buccal cleft extending to below

anterior border of eye; a strong erectile spine below the nostril; 4 spines at angle of præopercle, upper very strong. Dorsal and anal confluent with caudal, which is pointed; D. XXXI 150; spines short; distance between first spine and head  $\frac{2}{5}$  length of latter; A. II 150. Pectoral  $\frac{1}{3}$  length of head. Scales very small, 15 between origin of soft dorsal and lateral line. Brownish, marked with darker.

Total length 200 millim.

Stanley Pool, Congo. Collected by Mr. Greshoff. The specimen, now in the British Museum, through the kindness of Prof. Hubrecht, had been provisionally referred to *M. cryptacanthus*, Gthr., by Mlle. Schilthuis (Tijdschr. Nederl. Dierk. Ver. [2] iii. 1891, p. 84).

XIII.—*On the Identity of Polytrema planum of Carter with P. miniaceum var. involva.* By FREDERICK CHAPMAN, A.L.S., F.R.M.S.

IN the Ann. & Mag. Nat. Hist. for 1876 Dr. H. J. Carter figured and described \* a species of *Polytrema* found encrusting old corals, which he compared with a spreading *Melobesia* in its habit of growth. In the following year † the same author described other specimens of a similar organism showing a more advanced stage of growth; and observing a relationship between the structure of this and certain adherent types of *Gypsina*, he proposed to drop the former name, both generic and specific (a method opposed to accepted rules of nomenclature), and to re-name the form *Gypsina melobesioides*. The last-named specimens Carter did not figure. A few weeks ago, however, by the kind assistance of Prof. Jeffrey Bell, I was so fortunate as to find, in the Zoological Department of the Natural History Museum, Carter's type specimen, labelled *Gypsina melobesioides*. This specimen has encrusted the lower part of a sponge from Mauritius.

The enveloping form of *Polytrema* which has been found in such abundance in the rocks and reef-deposits of the atoll of Funafuti, and to which I had given the name *Polytrema miniaceum* var. *involva*, is identical with Carter's type specimen. This identification could not be satisfactorily established from the meagre figure of *Polytrema planum* which Carter gives, whilst his reference to the mature

\* Ser. 4, vol. xvii. pp. 211, 212, pl. xiii. figs. 18, 19.

† *Ibid.* ser. 4, vol. xx. p. 172.